

“KNOWLEDGE AND LIFESTYLE PRACTICES REGARDING CARDIOVASCULAR RISK FACTORS AMONG MIDDLE SCHOOL CHILDREN IN A RURAL AREA IN COIMBATORE”

Abstract

Background: Cardiovascular disease is on the rise and is a global threat by being the leading cause of mortality globally. Primordial prevention of the potential risk factors will benefit not only the individual but also reduce the burden on the health sector as a whole. Early adolescence is the period in which the children are initially exposed to risk factors. Rapid urbanization and change in lifestyle that occurred during the past two decades have led to the growing burden of coronary risk factors even in rural setting in India.

Objectives: To assess the level of awareness of risk factors of cardiovascular diseases among middle School children (6th – 8th standard) in the field practice area of Rural Health Training Centre, Vedapatti, attached to Department of Community Medicine, PSG IMSR, Coimbatore & to examine the association of socio-demographic factors and lifestyle practices with physical parameters of cardiovascular risk factors among these middle School children.

Settings and Design: A School based cross sectional study involving 502 students of 6th to 8th standard.

Material and Methods: The study was approved by IHEC. Demographic details and informed written consent was obtained from the parents. Assent was obtained from the students. Self administered questionnaires for assessing the Knowledge of cardiovascular risk factors, physical activity, sedentary activity per day, dietary food frequency and tobacco product usage were collected. Then anthropometry, blood pressure & step test for assessing the cardio-respiratory reserve were measured. Dependent variables were Knowledge, overweight & obesity, elevated Blood pressure(BP, poor cardio-respiratory reserve. Logistic regression analysis was done to identify association of factors with last three dependent variables.

Results: In our study Adequate knowledge of cardiovascular disease risk factors was found in 28.7% of the students (95% CI 24.72% - 32.66%).Inadequate physical activity 42.2% (95% CI ;37.9% - 46.6%), Unacceptable dietary practices 60.2% (95% CI ;55.7% - 64.5%), tobacco product usage 8.37% (95% CI ;6.1% - 11.23%) and time spent in sedentary activity in a usual day of more than 4 hours was seen in 25.1% (95% CI ;21.3% - 28.9%) of the 502 participants. About 11.4% of the students were overweight and 6.6% were Obese. Elevated blood pressure was seen in 13.3% of students. Inadequate physical activity and tobacco product usage was associated with overweight & obesity and Inadequate physical activity with elevated BP

Conclusion: This study establishes the fact that the knowledge about cardiovascular disease and lifestyle practices were not satisfactory among the study participants. Creating awareness among the students and providing access for adequate physical activity and avoidance of tobacco products is the need of the hour. This might be helpful in tackling the future burden on health due to cardiovascular disease in particular and non communicable disease as a whole as most of the risk factors overlap.

Key words: Cardiovascular risk factors, School children, primordial prevention, Knowledge, Lifestyle practices,